

L 19692-65

ACCESSION NR: AP5000611

signal reception. Radiation from each source was recorded simultaneously at 20, 25, 31, and 38.5 Mc. Recorder time constant was nearly 30 sec. Cassiopeia-A was used as a standard source of radiation. No discontinuity of the spectrum was noted for sources situated within the angles $151^\circ \leq \theta_{II} \leq 200^\circ$, and $-13^\circ \leq \theta_{II} \leq 60^\circ$. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Instytut radiofizyki i elektroniki AN URSR (Institute of Radio Physics and Electronics, AN UkrSSR)

SUBMITTED: 27Mar64

ENCL: 00

SUB CODE: AA, EC

NO REF SOV: 004

OTHER: 006

ATD PRESS: 3161

Card 2/2

BRAUDE, S. Ya.; VAYNSHTEIN, V.V.

Distribution of thermal and nonthermal radiation components over
the galactic disc. Izv. vys. ucheb. zav. radiofiz. 7 no.2:193-201.
1964 (NIRA 18:1)

i. Institut radiofiziki i elektroniki AN UkrSSR.

MAKEL'YAN, L.I.; BRADIN, L.I.; KRYUKOV, V.V.; KRYUKOV, V.V.; MEN'KOV, V.V.
SODIN, L.I.

Study of the spectra of discrete cosmic radio emission sources at
frequencies below 40 Mc. Izv. Akad. Nauk SSSR, 1965, No. 1, 1-5. (MIRA 19:5)

1. Institut radiofiziki i elektroniki (N Kazan).

1 33117-62 FDD/EMT(11)/LAC(11)/LAC-4/230(t) Pe-5/Pae-2/Pi-4 GR/12-4

ACCESSION NR: AP5006015

S/0141/64/007/006/1032/1040

AUTHOR: Braude, S. Ya.; Vaysberg, V. V.

TITLE: Low frequency spectrum of cosmic radio emission

SOURCE: IVUZ. Radiofizika, v. 7, no. 6, 1964, 1032-1040

TOPIC TAGS: cosmic radio emission, galactic disc, galactic halo, synchrotron radiation, radio emission spectrum, ionized hydrogen

ABSTRACT: This is a continuation of an earlier paper (Izv. vyssh. uch. zav. - Radiofizika, v. 7, 193, 1964) dealing with a multi-layer model of a galactic disc consisting of alternating layers of synchrotron radiation and absorption in HII. Since the earlier calculations were made without account of the radio emission from the halo, the authors check in the present article the applicability of the multi-layer model if the emission from the halo is also taken into account. The particular form of the model is considered in which it is assumed that the thermal and nonthermal components are thoroughly mixed in the disc. The low-frequency spectrum of cosmic radio emission ($\nu < 10^8$ cps) is regarded as the result of emission of synchrotron radiation from the halo in the ionized hydrogen of the galaxy.

Card 1/3

1 38119-65

ACCESSION NR: AP5006015

disc. The model is such that the emission measure (ME) is unequal along different lines of sight, even though the HII filling the galactic disc forms a single layer. Owing to the uneven distribution of the HII in the disc, it is expected that the ME (which characterizes the degree of absorption) in a given direction would deviate from that in other directions in accordance with a random law (within the directivity pattern of the radio telescope). Although the model in this experiment show that the radiation flux can fluctuate greatly in such a model. Experiments aimed at checking these results should provide for elimination of fluctuations of ionospheric origin, by receiving the cosmic background outside the limits of the ionosphere. Such measurements at low frequencies are now feasible. Estimates show that the fluctuations in the radiation flux can reach 37% of the radio emission from the halo. Estimates of the electron density, determined from the average emission measure, agree with those obtained by the authors previously and by others. It is therefore concluded that the proposed model can explain earlier measurements of the low-frequency spectrum of galactic radio emission without resorting to the ionospheric model. The model is described in detail in the text, and the results of the experiments are given. Orig. art. contains 17 figures, 17 formulas, and 1 table.

Card 2/3

L 38119-65

ACCESSION NR: AP5006015

ASSOCIATION: Institut radiofiziki i elektroniki AN UkrSSR (Institute of Radio
Physics and Electronics, AN UkrSSR)

SUBMITTED: 30Nov63

ENCL: 00

SUB CODE: AA

NR REF SOV: 008

OTHER: 011

Card 3/3

L 58385-65 FBD/EWT(1)/ENG(v)/EEC-4/EEC(t) Pe-5/Pae-2/Pi-4 GN/WS-4
ACCESSION NR: AP5015584 UR/0033/65/042/003/0618/0628
523.164.42

AUTHOR: Bazelyan, L. L.; Braude, S. Ya.; Vaysberg, V. V.; Krymkin, V. V.;
Men', A. V.; Sodin, L. G.

TITLE: Investigation of the spectra of discrete cosmic radio emission sources at
frequencies below 40 Mc

SOURCE: Astronomicheskii zhurnal, v. 42, no. 3, 1965, 618-628

TOPIC TAGS: cosmic radio emission, radio emission source, radio emission meas-
urement, radio telescope

ABSTRACT: The spectra of 14 discrete sources (in the 20--40-Mc range) were in-
vestigated at the Radio Astronomy Observatory of the Institute of Radio Physics
and Electronics, Academy of Sciences UkrSSR, from October 1963 through July 1964.
All observations were made between 2200 and 0800 hours local time. The radio tele-
scope employed an interferometer, and its antenna system consisted of two wideband
multielement electrically phased arrays, each measuring 176 x 17 m and spaced
470 m apart on an east-west line. Each array consisted of 178 horizontal dipoles.
Pattern width was 4° for 20 Mc and 2° for 40 Mc. Lobe width of the interference

Card 1/4

L 58385-65

ACCESSION NR: AP5015584

pattern was 1.6° for 20 Mc and 0.8° for 40 Mc. Beam declination along the meridian was regulated by remote-control delay lines. The telescope radiometers were phase modulated by phase shifting the signal of one of the antennas through 180° at a frequency of 60 cps. The signals of each antenna were amplified by hf preamplifiers. The passband of the preamplifiers and of the phase shifter was about 20 Mc. The adjustable passbands of the four radiometers made it possible to record each source at four frequencies simultaneously (20, 25, 30—31, and 38.5 Mc). The recordings were calibrated with a standard-signal generator fed through a calibrated attenuator and a splitter to the preamplifier inputs. All the sources were measured by comparing them with the standard flux of source 3C 461 (Cas-A), which at 20 Mc is 450×10^{-24} w/m² cps. Flux densities ($S \cdot 10^{24}$ w/Mc) and the mean probable errors ($\Delta\%$) for fourteen of the sources are listed in Table 1 of the Enclosure. On the basis of these and previous measurements of Cas-A, Signus-A, Virgo-A, and Taurus-A, the spectra of 18 discrete sources can be divided into two classes: spectra with a constant spectral index from 20 to 1400—3200 Mc (13 sources) and spectra with a spectral index which is a function of the frequency (5 sources). Orig. art. has: 3 figures and 2 tables. [DW]

ASSOCIATION: Institut radiofiziki i elektroniki Akademii nauk UkrSSR (Institute of Radio Physics and Electronics, Academy of Sciences, UkrSSR)

Card 2/4

L 58385-65

ACCESSION NR: AP5015584

SUBMITTED: 13Sep64

ENCL: 01

SUB CODE: AA, EC

NO REF SOV: 016

OTHER: 015

ATD PRESS: 4046

Card 3/4

L 58385-65

ACCESSION NR: AP5015584

ENCLOSURE: 01

Table 1. Flux densities and mean expected errors for 14 discrete sources

Frequency Mc.	20	25	31	38.5	38	38
source	$S \cdot 10^{24} \Delta \%$	$S \cdot 10^{24} \Delta \%$	$S \cdot 10^{24} \Delta \%$	$S \cdot 10^{24} \Delta \%$	$S \cdot 10^{24} \Delta \%$	$S \cdot 10^{24} \Delta \%$
3C 64	9.1 26	9.6 29	7.6 27	4.5 45	4.7 25	5.5 46
3C 111	3.3 31	4.1 26	4.4 32	2.8 48	2.2 15	2.5 27
3C 123	8.7 26	8.8 29	6.4 27	10 26	5.1 15	6.0 25
3C 134	5.5 30	5.9 32	5.1 29	3.7 37	3.0 25	2.7 26
3C 166	3.9 30	2.6 50	—	—	0.68 15	—
3C 196	3.7 25	4.3 29	2.5 27	2.4 27	1.85 15	1.25 56
3C 218	25.0 26	14.5 28	15.8 33	14.9 31	14.5 25	11.0 9
3C 219	3.0 27	3.3 31	2.1 27	2.2 27	1.2 25	—
3C 310	6.6 31	4.5 40	3.4 36	6.4 32	2.0 25	2.7 37
3C 338	3.6 32	3.9 35	2.4 33	2.6 34	1.8 15	2.25 31
3C 348	28.5 38	26.5 29	13.7 36	17.2 27	14.5 25	15.7 12
3C 352	8.8 33	10.5 31	5.2 35	7.7 34	6.8 15	6.6 16
3C 433	—	—	1.7 33	4.5 36	1.5 15	1.8 39
3C 428	7.2 34	3.4 42	2.7 31	2.8 40	1.3 25	—

Card

VAYSBERG, Ya.D.

Horizontal spaces between underground utility installations.

Stroi. truboprov. 8 no.3:15-17 Mr '63.

(MIRA 16:5)

1. Nachal'nik tekhnicheskogo otdela instituta Lengiproinzhproyekt,
Leningrad.

(Pipelines)

YAKOVLEV, A.T.; VAYSBERG, Ya.D.; GORSHKOV, V.A., red.

[Designing city gas mains] Proektirovanie gorodskikh
gazoprovodov. Moskva, Izd-vo M-va kommun.khoz.
RSFSR, 1963. 163 p. (MIRA 17:6)

VAYSBERG, Ya.D. [deceased]

Giving up the hydraulic testing of gas pipelines after their
placement on supports. Stroi. truboprov. 9 no.6:36-37 Je '64.
(MIRA 17:12)

1. Løngiproinzhpoyekt, Leningrad.

5 21

Photo-Electric Method, of Determining Vanadium in Steel.
 A. I. Davydov and Z. M. Vaytberg. (Zavodskaya Laboratoriya, 1940, No. 7, pp. 715-723). (In Russian). A detailed study was made of the conditions under which the formation of the phospho-vanadium molybdate and phospho-vanadium tungstate complexes reduced with stannous chloride could be used for the determination of vanadium. A method based on the formation of the latter complex was developed and was found suitable for the determination of vanadium contents of 0.1% to 2% with an accuracy of 4% of the amount being determined. The time taken varied from 18 to 30 min. depending on the time required to dissolve the sample. A light filter with maximum transmissibility at 550 mμ is used. 0.1-0.6% of titanium, 0.1-0.6% of copper, 0.03-0.2% of arsenic and 0.1-0.8% of molybdenum do not interfere. 1-5% of cobalt, 0.1-5% of nickel and 1-3% of chromium have practically no effect. In the presence of larger amounts of chromium its effect on the colour of the reduced solution is determined in a blank test.

A18-11A METALLURGICAL LITERATURE CLASSIFICATION

<p>CA</p>		<p>7</p>
<p>PROCESSES AND PROPERTIES INDEX</p> <p>A photoelectric method for the determination of vanadium in ores. Z. M. Valsberg and A. L. Davydov. <i>Zavodskaya Lab.</i> 11:352-3 (1945). The method is based on the formation of phospho-tungstic-molybdic complex and its reduction with SnCl_2. It can be used to det. V in ores contg. 0.02-0.2% of V in the presence of Cr, Ni, Ti, Cu, As, Mo (up to 1%) without their preliminary sepn. Fuse 1 g. of the ore in an Fe crucible with a 7-fold quantity of Na_2O_2, ext. the melt in a small vol. of water, and add 30 ml. of 18 N H_2SO_4. To dissolve MnO_2, add a little 3 N HCl. Add 8 ml. of 7.6 N HNO_3, evap. to 70-80 ml., cool, transfer to a 100-ml. measuring flask, add water to the mark, and mix carefully. Add 5 ml. of H_2O_2 (1.7) to 20 ml. of the soln. in a 100-ml. Brlenmeyer flask, heat to boiling, add 0 ml. of 5% $\text{Na}_2\text{WO}_4 \cdot 2\text{H}_2\text{O}$, heat to 82-85°, let the soln. stand for 2 min. Cool, add 1 ml. of 0.5% SnCl_2, transfer to a 50-ml. measuring flask, dil. with water to the mark, mix, and det. the intensity of the color in a 30-mm. layer of the soln. with a yellow-green light filter, and det. V by means of a calibration curve. For samples with less than 0.1% of V better results are obtained by using the photoelec. method. Five references. W. R. Henn</p>		
<p>ASB:SLA METALLURGICAL LITERATURE CLASSIFICATION</p>		

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																										PROCESSES AND PROPERTIES INDEX																									
CA																										17																									
<p>Photocolorimetric determination of some opium alkaloids. 1. Determining morphine. Z. M. Yulberg, Ya. A. Palkov, and B. G. Khizman. <i>Farmatsiya</i> 9, No. 4, 18-20(1946).—Reactions of morphine with $K_2Fe(CN)_6$ and with $FeCl_3$ were studied. Both reagents lack accuracy and specificity. Molybdosulfuric acid permits sensitive and accurate photocolorimetric assays even in the presence of various other drugs, including the other opium alkaloids. The procedure is described. J. F. Smith</p>																																																			
ASB-SLA RETAILING/LITERATURE CLASSIFICATION																																																			

1ST AND 2ND ORDERS																										1ST AND 2ND ORDERS																									
COMMON ELEMENTS																										COMMON VARIABLES INDEX																									
<p>CA</p> <p>17</p> <p>Photochemical determination of some opium alkaloids. II. Determining codeine and narcaine. Z. M. Vajsborg, Ya. A. Fialkov, and H. G. Khristman. <i>Farmaziya</i> 10, No. 1, 26-30(1947); cf. C.A. 41, 7083a. Four concn. factors (Br, Na₂SO₄, NH₄OH, and HCl) and the temp. factor were studied in the photochemical detn. of codeine (I) by bromination. Preferred conditions, with I at 1 g./l., are: 5 ml. I soln., dild. to 10 ml.; 0.5 ml. HCl (concd. HCl dild. 12:1, then 10:1); 1 ml. satd. (15-20°) Br water; after 5 min. 1 ml. excess Na₂SO₄ (6.4 g. in 100 cc. H₂O) above decolorization end point; after boiling and cooling, 0.5 ml. 25% NH₄OH. Observed errors range from -1 to 3%. Presence of other opium alkaloids impairs accuracy; lactose and aspirin do not interfere. For narcaine (II) the preferred conditions are: 1 mg. hydrochloride, dild. from initial 5 ml. to 7 ml.; 0.5 ml. HCl (as for I); 0.5 ml. satd. Br water; after 5 min., 1.5 ml. Na₂SO₄ (as for I); after 3 min. at 50°, 0.2 ml. 2.5% NH₄OH. This detn. of II is accurate to within 3%. The colorimetric standards were made up from known solns. of I and II and examd. in a layer 15 mm. thick against a blue filter. Julian F. Smith</p>																																																			
																										<p>ASB-51A METALLURGICAL LITERATURE CLASSIFICATION</p>																									
<p>1ST AND 2ND ORDERS</p>																										<p>1ST AND 2ND ORDERS</p>																									

Photometric method for determining columbium in steel. A. L. Davydov, Z. M. Valsberg, and L. E. Burkser. *Zarodskaya Lab.* 13, 1038-43(1947).—The blue complex of Co with phosphomolybdate is most intense when the soln. is 0.4-0.7 N in H_2SO_4 ; the color is independent of the excess of $SnCl_2$ used; phosphate above 0.05 mg. does not affect the color intensity (below that, the color is weaker). The following procedure is recommended. Digest 0.1 g. of steel with 5 ml. of 8 N H_2SO_4 soln. and heat until dissolved. Add 0.2 ml. of concd. HNO_3 and 5 ml. of 2% HF. Boil 10 min., dil. with 10 ml. of 8 N H_2SO_4 , and add 25 ml. H_2O . Make up to 50 ml. and transfer a 5-ml. aliquot to a 50-ml. volumetric flask, mix with 2 ml. NaH_2PO_4 soln. (0.8 g. per liter), 14 ml. water, and 4 ml. 2% $(NH_4)_2MoO_4$ soln. Heat to 30° and after 15 min. add 20 ml. of 6 N H_2SO_4 (to prevent reduction of molybdate). Wait 30 sec. and add 4 ml. 0.5% $SnCl_2$ soln. Dil. to 50 ml. and measure the color in a photometer against the standard. Mn, Cr, Ni, Si, and C do not affect the result which will agree within 0.01-0.02% of the truth. G. M. Krasovskii

ASB-SEA METALLURGICAL LITERATURE CLASSIFICATION

VAYSBERG, Z. M.

IA 9/49 T9

USSR/Chemistry - Tungstates, Reduction of Jun 48
Chemistry - Molybdates, Reduction of

"New Data on the Structure of Molybdenum and Tungsten Blue Derivatives," Z. M. Vaysberg, B. Ya. Dain, Inst of Phys Chem imeni L. V. Pisarzhevskiy, Acad Sci Ukrainian SSR, 5 3/4 pp

"Zhur Obshch Khim" Vol XVIII(LXXX), No 6

Prepares and investigates absorption spectra of molybdate and tungstate reduction products in presence of phosphorous, silicon, boron and arsenic salts. Compounds have various spectra and can be regarded as derivatives of molybdenum and tungsten blue. Submitted 28 Jan 1947.

9/4919

AYSBERG, Z.M.; DAIN, B.Ya.

Chemical nature of the derivatives of molybdenum and tungsten blues.
Dop. AN URSS no.5:33-38 '49. (MLRA 9:9)

1. Institut fizichnoi khimii imeni L.V. Pisarsheva'kogo AN URSS Viddil
fotokhimii. Predstaviv diysniy chlen AN URSS O.I. Brods'kiy.
(Pigments)

U.S.S.R.

The chemical nature and structure of the derivatives of molybdenum and tungsten blue. Z. M. Valsberg and B. Ya. Dain. *Izvest. Sibirsk. Platiny i Drug. Biagored. Metall. Akad. Nauk S.S.S.R., Inst. Obshchei i Neorg. Khim.* No. 26, 154-62 (1951).—By aid of a medium-sized Hilger spectrograph the ultraviolet absorption curves of phosphomolybdic, silicomolybdic, arsenomolybdic, phosphotungstic, silicotungstic, phosphomolybdovanadic (I) acids, and the reduction products thereof, i.e. the various Mo and W blues, were plotted (200-450 mμ), also the compds. were analyzed. The various blues showed only a slight increase in the percentage of the constituents; e.g.: I before and after reduction, resp., contained Mo 50.2 and 50.8, P 1.50 and 1.55, V 2.35 and 2.40%. As the spectral curves are very similar to one another (the absorptions almost always obey Lambert-Beer's law), it is concluded that the original compds. and the blues produced therefrom have very similar structures. Therefore it is proposed to call the blues "heteropoly acids of the reduced series." W. J.

W. J.

VAYSBERG, Z.M.

Spectra and photochemical properties of *o,o'*-dihydroxyazo dyes and their metal complexes. I. Acid chrome blue-black and its lacs. T. S. Glikman, B. F. Kutsaya, and Z. M. Valsberg. *Ukrain. Khim. Zhur.* 19, 291-301 (1953); *Izvest. Zhur. Khim.* 1954, No. 10300. -- Absorption spectra and photochem. properties of the dye and of its Cr, Cu, Fe, and Co salts were studied. For each atom of Cu or Fe there were 2 mols. of the dye, and for each atom of Cr or Co there were 3 mols. of the dye. The absorption spectra of the dye and of the salts were similar, but the max. in the spectra of the salts were displaced by 10-60 mμ toward the long-wave end. The absorption coeffs. of the salts were appreciably higher throughout the entire spectrum. Quanta yield of photodecompn. at λ 365 mμ were 4×10^{-4} for the dye, 2×10^{-4} for the Fe salt, 3×10^{-4} for Co salt, 5×10^{-4} for Cr salt, and 6×10^{-4} for Cu salt. M. Hosh

Inst. Phys. Chemistry im. P. Lavrenko, AS USSR

VAYSBERG, K.M.; ZIZIN, V.G.; Prinimali uchastiye: TRAVKINA, V.M.; SAFINA,
R.M.

Spectrographic determination of vanadium and nickel in petroleum
products. Zav.lab 26 no.10:1123-1124 '60. (MIRA 13:10)

1. Bashkirskiy nauchno-issledovatel'skiy institut po pereabotke
nefti.

(Vanadium—Spectra)

(Nickel—Spectra)

(Petroleum products)

1. VAYSBERGER, A.
2. USSR (600)
4. Science
7. Physical methods in organic chemistry, Pod red. A. Vaysberger, Perev. s angl. Izd-vo inostr. lit-ry, Moskva, Vol. 2, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

KUSTOV, B. J. and VAYSBERGER, O. N.

"Problems of Economical Utilization of Coke Gas in the Soviet Union," (Hutnicke
Listy, 1951, Vol. 6, Jan., pp 42-43. In Czech.

VAYSBEYN, M., inzh.

Mechanical ventilation of grain in elevator silos. Muk.-elev.
prom. 25 no.8:20 Ag '59. (MIRA 13:1)

1.Sverdlovskaya mel'nitsa No.1.
(Ventilation) (Grain--Storage)

VAYSBEIN, S. A., jt. au.

TYSHKOVSKII, IA. D.

Sulphuric acid. Moskva, Gosknimtekhnizdat, 1934. 99 p. (49-44832)

TP215.T9

1. Sulphuric acid. I. Vaisbein, S. A., jt. au.

VAJSBETI, S. A.

The chemical industry to the 17th Congress of the All-Union Communist Party
Bolshevik Moskva, Gos, khim.-tekh. izd-vo, 1934. 106 p.

Cyr.4 HL307

KALMYKOV, N.N.; VAYSHEYN, S.A.; BATTIN, I.A., redaktor; SHPAK, Ye.G., tekhnicheskiiy redaktor

[Economics of the socialist chemical industry] Ekonomika sotsialisticheskoi khimicheskoi promyshlennosti. Moskva, Gos.nauchno-tekhn.izd-vo khim.lit-ry, 1955. 302 p.
(Chemical industries) (MLRA 9:1)

VHYSBEYN, S.G.

VASILENKO, V.Kh., professor (Moscow)

"Diagnosis and therapy of emergency conditions in the clinical treatment of internal diseases." S.G. Vaisbein. Reviewed by V. Kh. Vasilenko. Klin.med. 33 no.5:91-94 My '55. (MLRA 8:9)
(VAISBEIN, V.Kh) (DIAGNOSIS) (MEDICINE)

VAYSBNYN, S.G.

[Emergency cases in the clinical treatment of internal diseases;
diagnostics and therapy] Neotlozhnye sostoianiia v klinike vnutren-
nikh boleznei; diagnostika i terapiia. Izd. 2-e, perer. i dop.
Moskva, Medgiz, 1957. 402 p. (MIRA 10:11)
(MEDICINE, INTERNAL)

VAYSBEYN, Sof'ya Grigor'yevna; BOGOSLOVSKIY, V.A., red.; SENCHILO,
K.K., tekhn. red.

[Emergency states in the clinical treatment of internal
diseases] Neotlozhnye sostoiانيا v klinike vnutrennikh bo-
leznei; diagnostika i terapiia. Izd.3., perer.i dop. Mo-
skva, Medgiz, 1962. 375 p. (MIRA 15:9)
(MEDICINE, INTERNAL) (MEDICAL EMERGENCIES)

VAYSBEYN, S.G. (Moskva)

Hemorrhages in diseases of the internal organs. Med. sestra 20
no.4:14-18 Ap '61. (MIRA 14:5)
(HEMORRHAGES) (VISCERA—DISEASES)

VAYSBLAT, A.S.; DZHUMAMBAYEVA, A.A.; LIVANSKAYA, N.N.

Treatment of trachoma in Tajikistan with the new preparation
dibiomycin. Antibiotiki 7 no.9:829-832 S '62. (MIRA 15:12)

1. Kafedra mikrobiologii (zav. - chlen-korrespondent AMN SSSR
Z.V.Yermol'yeva) TSentral'nogo instituta usovershenstvovaniya
vrachey i Respublikanskiy trakhomatoznyy dispanser Ministerstva
zdravookhraneniya Tadzhikskoy SSR.

(TAJIKISTAN—CONJUNCTIVITIS; GRANULAR) (AUREOMYCIN)

KASYMOV, U.; VAYSBLAT, A.S., vrach; ZEL'TSER, N.Ya., vrach

Control of trachoma in Kolkhozabad District. Zdrav. Tadzh. 7
no. 3:17-19 My-Je '60. (MIRA 14:4)

1. Predsedatel' Kolkhozabadского rayonnogo ispolnitel'nogo komiteta
(for Kasymov).

(KOLKHOZABAD DISTRICT—CONJUNCTIVITIS, GRANULAR)

VAYSBIAT, A.S.

Effect of a 1% emulsion of synthomycin on the conjunctival flora.
in trachoma. Zdrav. Tadzh. 3 no.1:19-21 Ja-F '56. (MIRA 12:7)

1. Iz Respublikanskogo trakhomatoznogo dispansera.
(CONJUNCTIVITIS, GRANULAR)
(CHLOROMYCETIN)

2329 Vaysblat, S. N.

Provodnikovoye Obezboli-Vanive V Khirurgii Zubov I Chelyustey. B-E Pererabot
I Dop. IZD., Kiev, Gosmedizdat USSR, 1954. 290 s. s Ill.; 2L. Ill. 23sm.
8.000 EKZ. 10r 60k. V Per.- Bibliogr: s. 274-86-
(54-56513)

VAYSBLAST, S.N., professor, zasluzhennyy deyatel' nauki; NOVIK, I.O.,
dotsent (Kiyev)

Development and present state of stomatology in Ukraine. Stomato-
logiia. no.4:3-8 J1-Ag '54. (MLRA 7:9)
(DENTISTRY,
in Russia)

VAYSBLAT, A.S.

Affecting the process of color sensation by hypnotism. Trudy AN Tadzh.
SSR. 40:159-162 '55. (MIRA 9:10)

1. Iz Respublikanskogo trakhomatoznogo dispensera Tadzhikskoy SSR.
(HYPNOTISM) (COLOR SENSE)

VAYSBLAT, A.S.

~~Eliminating the pain syndrome in iridocyclitis and glaucoma by hyp-~~
notic suggestion. Trudy AN Tadzh. SSR 40:169-171 '55. (MIRA 9:10)

1. Iz Respublikanskogo trakhomatoznogo dispansera Tadjikskoy SSR.
(GLAUCOMA) (EYE--DISEASES AND DEFECTS) (HYPNOTISM)

USSR/Pharmacology. Toxicology. Antibiotics.

V

Abs Jour: Ref. Zhur. - Biol., No 22, 1958, 103002

Author : Vaysblat, A. S.

Inst : -

Title : The Application of a New Antibiotic-Terramycin
For Treatment of Trachoma.

Orig Pub: Zdravookhr. Tadzhikistana, 1958, No. 2, 37-39

Abstract: No abstract

Card 1/1

40

VAYSBLAT, I.N., assistant (Kiyev)

Diagnosis of cysts of the mandible. Probl. chel.-lit. khir.
no.1:187-194 '65.

(MIRA 18:10)

SOLNTSEV, A.M.; VAYSBLAT, I.N.

Medical procedure in the case of unintentional opening of the antrum.
Probl. stom. 5:260-267 '60. (MIRA 15:2)

1. Kiyevskiy meditsinskiy institut usovershenstvovaniya vrachey.
(ANTRUM SURGERY)

VAYSBLAT, I.N. (Kiyev)

Treatment of maxillary cysts. Probl. stom. 6:198-205 '62.

(MIRA 16:3)

(JAWS--TUMORS)

(CYSTS)

VAYSBLAT, S. N.

VAYSBLAT, S. N. "Problems of anesthesia in the surgery of the teeth and jaws", Vracheb. delo, 1948, No. 12, paragraphs 1059-62.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

VAYSBLAT, S.N., professor, zaslushennyi deyatel' nauki (Kiyev)

Extraoral mandibular anesthesia and its significance in stomatologic
practice. Stomatologiya no.6:29-31 '53.

(MLA 7:1)

(Anesthesia in dentistry)

VAYSBLAT, S.N., professor, zasluzhennyy deyatel' nauki; DATSENKO, M.F.,
redaktor; RAYZ, A.L., tekhnicheskii redaktor.

[Conduction of anesthesia in dental and jaw surgery] Provodniko-
voe obezpolivanie v khirurgii zubov i cheljustei. 6-e perer. i
dop. izd. Kiev, Gos.med.izd-vo USSR, 1954. 288 p. (MIRA 8:5)
(Anesthesia in dentistry)

VAYSBLAT, S.M., professor, zasluzhennyi deyatel' nauki (Kiyev)

Orbital approach in anesthesia of the foramen ovale. Stomatologiya
no.1:38-40 Ja-F '55. (MLRA 8:5)

(ANESTHESIA, REGIONAL,

foramen ovale, orbital approach)

(DENTISTRY, OPERATIVE, analgesia and anesthesia,
foramen ovale anesth., orbital approach)

VAYSBLAT, S.N.

LUKOMSKIY, I.G., professor.

"Conduction anesthesia in surgery of the teeth and jaws. S. N.

Vaisblat. Reviewed by I.G.Lukomskii. Stomatologiya no.3:57

My-Je '55.

(MLRA 8:9)

(VAISBLAT, S.N.) (ANESTHESIA IN DENTISTRY)

VAYSILAT, S.H., professor, zasluzhennyy doyatel' nauki USSR (Kiyev)

Suprazygomatic, so-called temporal pathways of conduction anesthesia
of the mandibular and maxillary nerves. Stomatologiya no.5:28-31
S-0 '55. (MIRA 9:2)

(ANESTHESIA, REGIONAL,
mandibular & maxillary nerves, suprazygomatic temporal
methods)

VAYSBLAT, S.N., zasluzhennyy deyatel' nauki, professor (Kiyev)

Orbital path of suborbital anesthesia. Stomatologiya 35 no.3:17-18
My-Je '56. (MLRA 9:9)

(LOCAL ANESTHESIA)

VAYSBLAT, S.N., zasluzhennyi deyatel' nauki, professor (Kiyev)

Features of using local anesthesia in pediatric stomatological
practice. Vrach.delo no.8:839-843 Ag '57. (MLRA 10:8)
(ANESTHESIA IN DENTISTRY)
(PEDIATRIC ANESTHESIA)

VAYSBLAT, S.N. (Kiyev)

Degree to which curettage of a periapical inflammatory focus is
necessary following extraction of a tooth in a periapical chronic
peridontitis. Probl. stom. 5:205-207 '60. (MIRA 15:2)
(TEETH_DISEASES) (DENTISTRY, OPERATIVE)
(TEETH_EXTRACTION)

VAYSBLAT, S.N., prof. (Kiyev)

Surgical treatment in paradentosis. Probl.stom. 4:305-310 '58.
(MIRA 13:6)

(GUMS—SURGERY)

VAYSELAT, S.N. (Kiyev)

Chronic odontogenic osteomyelitis of the jaw. Probl.stom. 6:
209-213 '62. (MIRA 16:3)
(OSTEOMYELITIS) (JAWS—DISEASES) (TEETH—DISEASES)

VAYSBLAT, S.N. (Kiyev)

Progress in local anesthesia in stomatology. Probl.stom. 6:332-
337 '62. (MIRA 16:3)

(LOCAL ANESTHESIA) (STOMATOLOGY)

VAYSBLAT, S.N., prof. (Kiyev)

Neuralgia of the glossopharyngeal nerve and its removal by
means of stem alcoholization. Kaz. med. zhur. no. 4:68-69
Jl-Ag '60. (MIRA 13:8)
(GLOSSOPHARYNGEAL NERVE—DISEASE)
(ALCOHOL—THERAPEUTIC USE)

VAYSBLAT, S.N., prof., zasluzhennyy deyatel' nauki (Kiyev)

Exact and diffuse methods of conduction anesthesia in the maxillofacial region. Vrach.delo no.12:1297-1299 D '59.

(MIRA 13:5)

(LOCAL ANESTHESIA)

VAYSBLAT, Solomon Naumovich, zasl. deyatel' nauki USSR, prof.;
GINZBURG, I.S., red.; BYKOV, N.M., tekhn. red.

[Local anesthesia for operations on the face, the jaws, and
the teeth] Mestnoe obezbolivanie pri operatsiyakh na litse,
cheliustiakh i zubakh. Kiev, Gosmedizdat USSR, 1962. 468 p.
(MIRA 16:3)

(LOCAL ANESTHESIA) (FACE--SURGERY)
(JAWS--SURGERY) (ANESTHESIA IN DENTISTRY)

15065

VAYSBLEKH, M.

USSR/Leather Plants 4414.0500
Textile Plants 4415.0600
Labor 5400.

Oct 1947

"Incorporation of Stakhanovite Methods in Enterprises of USSR," M. Vaysblekh, 2 p

"Legkaya Prom" Vol VII, No 10

Labor production plan fulfilled 100% during first half of 1947. General description of changes in machinery in following factories: Kiev shoe factory No 1, Dnepropetrovsk shoe factory No 9, Kharkov shoe factory No 5, Odessa saddlery and equippage factory, Kiev heel factory, Kremenchug leather plant No 13, Kiev knitwear factory imeni R. Lyuksemburg, Kharkov stocking factory, and L'vov knitwear factory.

15065

LC

VAYSBLIT, M.B., inzh.

Expand and improve the selection of wool fabrics. Tekst.prom.
19 no.10:16-19 0 '59. (MIRA 13:1)

1. Nachal'nik otdela sherstyanyoy promyshlennosti Vsesoyuznogo
instituta assortimenta legkoy promyshlennosti i kul'tury odezhdy.
(Woolen and worsted manufacture)

VAYSBORD, E.M. (Moskva)

Approximate method for optimum control synthesis. Avtom. i telem. 24
no.12:1626-1632 D '63. (MIRA 17:1)

VAYSEBORD, E. M. Cand Phys-Math Sci -- (diss) "On the existence of periodic solutions in certain systems of differential equations of the third and fourth order, and on the behavior of solutions of ^{systems of} differential equations ^{systems} in the ^{vicinity} neighborhood of a ^{singular} point." Mos, 1958. 8 pp

(Mos Order of Lenin and Order of Labor Red Banner State Univ im M. V.

150 copies
Lomonosov) (KL, 52-58, 97)

VAYSBOARD, E.M.

Existence of a periodic solution for nonlinear equations of the third and fourth orders. Nauch.dokl.vys.shkoly; fiz.-mat.nauki no.3:10-13 '59. (MIRA 13:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Differential equations)

16(1)

AUTHOR: Vaysbord, E. K.

SOV/140-59-4-6/26

TITLE: On the Existence of a Periodic Solution and on the Large of the Solutions of a System of Differential Equations of Third Order

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1959, Nr 4, pp 38 - 49 (USSR)

ABSTRACT: Let the system

$$(1) \dot{x} = f_{11}(x) + f_{12}(y) ; \dot{y} = f_{23}(z) ; \dot{z} = f_{31}(x) + f_{32}(y) + f_{33}(z)$$

be given, where all the f_{ik} are continuously differentiable.

Theorem : Let

a) $f_{1k}(0) = 0$

b) $f'_{11}(x) < 0, f'_{31}(x) < 0, \lim_{|x| \rightarrow \infty} f'_{11}(x) = -\infty, i = 1, 3$

c) $0 < f'_{12}(y) < c, f'_{23}(z) > 0, |f_{23}(z)| \leq a|z|$

Card 1/3

$0 < f'_{32}(y) < m, f'_{33}(z) < 0, q|z| < f_{33}(z),$

Boundedness in the
On the Existence of a Periodic Solution and on the / SOV/140-59-4-6/26
Large of the Solutions of a System of Differential Equations of Third
Order

whereby :

from $\lim_{y \rightarrow +\infty} |f_{32}(y)| < +\infty$ it is assumed to follow
 $\lim_{y \rightarrow +\infty} f'_{32}(y) = 0$

or from $\lim_{y \rightarrow -\infty} |f_{32}(y)| < +\infty$ it is assumed to follow
 $\lim_{y \rightarrow -\infty} f'_{32}(y) = 0$

d) on $f_{31}(x) + f_{32}(y) = 0$ it is assumed to be

$$f'_{12}(y) - \frac{f'_{11}(x)}{f'_{31}(x)} f'_{32}(y) > \eta > 0$$

e) $0 < A < \frac{f'_{11}(x)}{f'_{31}(x)}$

Card 2/3

On the Existence of a Periodic Solution and on the SOV/140-59-4-6/26
Boundedness in the Large of the Solutions of a System of Differential
Equations of Third Order

$$f) \frac{ca}{\Lambda q^2} < 1$$

$$g) f'_{23}(0) \left(f'_{33}(0) f'_{32}(0) + f'_{31}(0) f'_{12}(0) \right) - f'_{11}(0) f'_{33}(0) \cdot \\ \cdot \left(f'_{11}(0) + f'_{33}(0) \right) < 0 .$$

Then (1) possesses at least one periodic solution. All
solutions are bounded in the large for $t \rightarrow +\infty$.

Pliss, Skachkov and Tuzov are mentioned in the paper.

There are 10 references, 7 of which are Soviet, 2 American,
and 1 Italian.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: May 30, 1958

Card 3/3

L 65262-65

ACCESSION NR: AP5021851

UR/0280/65/000/004/0052/0059

AUTHOR: Vaysbord, E. M. (Moscow); Rozenshteyn, G. Sh. (Moscow)

TITLE: "Life"-time of stochastic automata

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 4, 1965, 52-59

TOPIC TAGS: stochastic process, computer simulation, nervous system, automaton

ABSTRACT: The usual investigations of models of biological control systems cover stable systems (e.g., homeostats) or nervous nuclei. Another interesting model can be established by studying unstable systems, i.e., systems which in an arbitrary stationary external medium can make a fast transition into one of the dangerous (catastrophic) states. The reasonable task for such types of systems is to search for a medium within which the lifetime of the normal (favorable) state is as long as possible. Such a problem is similar to the reliability problem in technology. The authors present the mathematical formulation of the model of an unstable system, and discuss the problem of maximizing the lifetime of such an unstable stochastic automaton by choosing an optimum initial function of the device. The method of successive approximations proposed for the calculation of the optimum function can be easily carried out on electronic computers using dynamic programming. The convergence of the mathematical procedure is also given. "The authors thank

Card 1/2

L 65262-65

ACCESSION NR: AP5021851

D. B. Yudin and M. I. Tsetlin for valuable remarks contributing to the refinement of the paper." Orig. art. has: 37 formulas and 4 tables.

ASSOCIATION: None

SUBMITTED: 30 March 65

ENCL: 00

SUB CODE: LS, DP

NO. REF SOV: 002

OTHER: 002

Card 2/2

16.3400

31910
6/039/62/056/001/002/003
B112/B138

AUTHOR: Vaysbord, E. M. (Moscow)

TITLE: Existence of a periodic solution to a non-linear third-order differential equation

PERIODICAL: Matematicheskii sbornik, v. 56(98), no. 1, 1952, 43-58

TEXT: The author demonstrates the existence of a periodic solution of the system: $dx_1/dt = x_2 - g_1(x_1)x_1$, $dx_2/dt = x_3 - g_2(x_1)x_1$.

$dx_3/dt = -g_3(x_1)x_1$. It is assumed that $g_1(x) = G_1(x)/x$ for $x \neq 0$, and $g_1(x) = G_1'(x)$ for $x = 0$, where the $G_1(x)$ are functions for which

Cauchy's problem of the equation $d^3x/dt^3 + d^2G_1(x)/dt^2 + dG_2(x)/dt + G_3(x) = 0$ is unambiguously solvable for arbitrary initial conditions. Additional assumptions: a) $G_1(x) > 0$, b) existence of $\lim_{x \rightarrow \infty} G_1(x) = G_1(\infty) > 0$.

c) $G_1(0)G_2(0)G_3(0), G_1(\infty)G_2(\infty)G_3(\infty)$.

Card 1/3

Existence of a periodic solution ...

31910
S/039/62/056/001/002/003
B112/B138

$$d) g_1(x_0) > \frac{(Vg_2(x_0) + \sqrt{g_2(x_0) + g_1^2(x_0)}) (g_1^2(x_0) + g_1(x_0) + 1 + V(g_2(x_0) + 1)^2 + g_2(x_0))}{Vg_2(x_0) (g_1^2(x_0) + g_1(x_0))} \Delta,$$

$$\Delta = \max(\Delta_1, \Delta_2, \Delta_3), \quad \Delta_i = \sup_{-\infty < x < +\infty} |g_i(x_0) - g_i(x)|,$$

$$e) \quad (g_1^2(x_0) g_1(0) + g_2(0))^2 > \\ > \max \left[(-g_2(x_0) g_1(0) + g_3(0))^2, \left(\frac{g_1(x_0)}{g_2(0)} g_3(0) - g_3(0) \right)^2 \right] + \\ + g_2(x_0) \frac{g_2^2(0)}{g_1^2(0)} \left(g_1(0) - \frac{g_3(0)}{g_2(0)} \right)^2,$$

$$f) \quad g_1^2(x_0) > g_2(x_0),$$

$$g) \quad g_1(x_0) > g_1(0).$$

An analogous theorem is proved for the case of a non-linear fourth-order equation. There are 2 figures and 5 references, 2 Soviet

Card 2

Existence of a periodic solution ...

31910
S/039/62/056/001/002/003
B112/B138

and 1 non-Soviet. The reference to the English-language publication reads as follows: L. L. Rauch, Oscillation of a third-order non-linear autonomous system. Contributions to the theory of non-linear oscillations, Annals of mathem. studies, No. 20 (1950), 39 - 89.

SUBMITTED: January 21, 1960

✓

Card 3/3

VAYSBOARD, E.M. (Moskva); ROZENSHTEYN, G.Sh. (Moskva)

"Life" of stochastic automata. Izv. AN SSSR. Tekh. kib. no.4:
52-59 J1-Ag '65. (MIRA 18:11)

ACC NR: AP6024361

SOURCE CODE: UR/0280/66/000/002/0045/0048

AUTHOR: Vaysbord, E. M. *(Moscow)*; Rozenshteyn, G. Sh. *(Moscow)*

ORG: none

TITLE: On a method of constructing optimal environments for unstable automata

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1966, 45-48

TOPIC TAGS: automation, electronic circuit environment, optimal control, dynamic programming, dynamic stability

ABSTRACT: The optimal environment in this case is construed as the environment which maximizes the lifetime of unstable stochastic automata. By analogy with the behavior of the higher animals, which is characterized by a regular alternation of periods of activity and periods of rest, the behavior (lifetime) of an unstable automaton may be optimized if for f time units it functions in spontaneous environments and for g time units, in an environment specially designed to prolong the automaton's life, after which the automaton again functions in a spontaneous environment for f cycles. In this connection, the authors propose a matrix method of computing the optimal environment, as based on the dynamic programming theory.

Card 1/2

ACC NR: AP6024361

Essentially, this means that for an automaton which follows a fixed matrix P of transition probabilities for f cycles and a "self-selected" transition matrix for g cycles, the optimal -- from the standpoint of maximizing the automaton's lifetime -- matrix Q can be found by determining the optimal mapping of $\varphi_0(A_i)$ of each state A_i ($i = 1, \dots, m$) onto one of the set of states at which the automaton may arrive in the course of g cycles. This mapping can be determined by means of the method of successive approximations based on the ideas of dynamic programming (Bellman, R. Dinamicheskoye programmirovaniye. Izd-vo inostr. lit. 1960 [Russian translation]). Orig. art. has: 10 formulas.

SUB CODE: 09, 12/ SUBM DATE: 13Jul65/ ORIG REF: 001/ OTH REF: 001

2/2

1. KOCHNEV, V. I.: VAYSEBORD, M. A.
2. USSR (600)
4. Cranes, Derricks, Etc.
7. Reconstruction of the boom of a portal crane. Rech.transp., 12, no. 6, 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VAYSBORD, N.A.; GRINBERG, A.A., kand. med. nauk

Pelvic arteriography; a review of literature. Akush. i gin.
40 no.2:84-89 Mr-Apr '64. (MIRA 17:11)

1. Gorodskaya klinicheskaya bol'nitsa No.29 imeni Baumana
(vedushchiy khirurg - kand. med. nauk L.M. Shnaper, glavnyy
vrach - kand. med. nauk N.G. Orlov), Moskva.

VAYSEROD, S.A.

YAKUBOV, V.F., inzh.; VAYSEROD, S.A., inzh.; KUDRYASHOV, S.A., inzh.

New grounding system for electric installations. Nov. tekhn. i pered.
op. v stroi. 20 no.3:27-28 M '58. (MIRA 11:3)
(Electric currents--Grounding)

(

S/084/60/000/03/059/083
D047/D002

AUTHOR: Vaysburd, A., Workshop Superintendent (Bykovo)

TITLE: Spare Parts Can Serve Longer ³

PERIODICAL: Grazhdanskaya aviatsiya, 1960, Nr 3, p 23 (USSR)

ABSTRACT: The author states that some parts of the ASh-82T engine and Il-14 aircraft could serve longer than the prescribed period i.e. potentially 3000 hours and longer. According to present regulations, the parts have to be changed after a certain period although they may still be good. ✓

Card 1/1

VAJSBURD, A. P.

(5)

✓ Determination of lithium in air. I. I. Paul and A. P. Vajsburd (Sci. Research Smitt. Inst., Novosibirsk). Gigiena i Sanit. 1953, No. 9, 49-50. — Li in the air can be detd. colorimetrically according to Nazarenko and Filatova (C.I. 44, 2841) in which the air is treated to give LiKFeO_4 , insol. in H_2O , from which the Fe can be detd. colorimetrically by the $\text{Fe}(\text{CNS})_3$ method. The reaction is sensitive to 0.002 mg. Fe, or 0.000245 mg. Li per 3 ml. At the level of 0.0004–0.0008 mg./l. in the air, the reproducibility of standard samples is within 6–10% relative.

G. M. Kozolapoff

VAYSBURD, A.Ya., inzh.

Increasing the life of iron mill rolls by the use of smaller
diameters. Stal' 21 no.12:1107 D '61. (MIRA 14:12)
(Rolls(Iron mills))

KORBUT, A.A., inzh.; KAMENETSKIY, L.Ye., kand. ekonom. nauk; VAYSBURD, B.M.,
inzh.

Using linear programming methods in planning the expansion of the Kansk-
Achinsk coal basin. Izv.vys.ucheb.zav.;gor.zhur. 7 no.6:48-51 '64.
(MIRA 17:12)

1. Leningradskiy vychislitel'nyy tsentr (for Korbud). 2. Gosudarstvennyy
institut po proyektirovaniyu shakht (for Kamenetskiy, Vaysburd).

8/089/62/013/005/012/012
B102/B104

AUTHORS: Vaysburd, D., Zakharov, Yu.

TITLE: Conference on the problem "Izmeneniye svoystv materialov pod deystviyem izlucheniya" (Radiation-induced changes in material properties")

PERIODICAL: Atomnaya energiya, v. 13, no. 5, 1962, 497-498

TEXT: The conference was held in November 1961 at the Tomskiy politekhnicheskiy institut (Tomsk Polytechnic Institute) (TPI). Studies at this institute, at the Sibirskiy fiziko-tekhnicheskiy institut (Siberian Physicotechnical Institute) (SFTI), and at the Tomskiy gosudarstvennyy universitet (Tomsk State University) (TGU) were reported and discussed. Scientists attended from Moscow, Irkutsk, Novosibirsk, Tashkent and Tbilisi. The main fields covered were: Determination of radiation resistance in dependence on the chemical composition of the material; physics of radiation defects and microprocesses; chemical radiation effects; apparatus for investigating radiation effects. The following scientists gave reports: A. A. Vorob'yev (TPI), radiation effects

Card 1/3

Conference on the problem ...

S/089/62/013/005/012/012
B102/B104

in ion crystals; A. V. Kuz'mina (TPI), calorimetric determination of energy stored in gamma-irradiated NaCl (1.47 cal/g); P. A. Savintsev, I. T. Berzina, A. A. Botaki, A. F. Naumov (TPI), irradiation-induced changes in physical properties of ion crystals; A. A. Vorob'yev, Ye. K. Zavadovskaya (TPI), radiation resistance of ion crystals as dependent on structure and composition; S. K. Salo (TPI), F-center concentration in X-ray-irradiated alkali halogenides; I. Ya. Melik-Gaykazyan, L. V. Grigoruk, M. I. Ignat'yeva (TPI), X-ray induced F-center formation of alkali halogenides as dependent on the bivalent-metal impurity content; B. V. Budylin and A. A. Vorob'yev (TPI), spontaneous F-center formation in neutron-irradiated and annealed ion crystals; A. K. Berzin, S. L. Kashchuk (TPI), β -radiation attenuation as reduced by small doses of neutron irradiation; M. A. Krivov, S. V. Molyanov, A. P. Vyatkin, V. I. Domnin, S. V. Mal'tsev, B. V. Mashkova (SFTI), effect of X- and γ -rays on semiconductor properties; V. M. Nesterov, Ye. S. Nesmelova, T. Kh. Mikhaylova, N. I. Ol'shanskaya (SFTI), radiation effects on crystalline polymers, rubbers, resin, and PVC plastics; V. V. Vorob'yev (TPI), radiation effects in ion crystals (review); V. V. Boldyrev, A. N. Oblivantsev, effect of previous X-ray irradiation on the thermal

Card 2/3

Conference on the problem ...

S/089/62/013/005/012/012
B102/B104

disintegration of permanganates; V. V. Boldyrev, Yu. A. Zakharov, V. I. Yeroshkin, effect of impurities on thermo-, photo-, and radiation resistance of ionic salts; L. S. Sokolov (TPI), output and measurement of a cyclotron beam for material irradiation; B. A. Kononov and V. I. Rudenko (TPI), new design of apparatus for measuring the betatron-electron absorption coefficient in crystals; B. A. Kononov, S. A. Kuznetsov, Yu. P. Tsurukin (TPI), measurements of electric conductivity of irradiated samples in vacuo (10^{-5} mm Hg, -150 to $+150^{\circ}\text{C}$). ✓

Card 3/3

ACC NR: AR6035057

SOURCE CODE: UR/0058/66/000/008/E090/E090

AUTHOR: Vaysburd, D. I. ; Melik-Gaykakazyan, I. Ya.

TITLE: Kinetic equation for the accumulation of F-centers in alkali-halide monocrystals irradiated by protons

SOURCE: Ref. zh. Fizika, Abs. 8E686

REF SOURCE: Iz. Tomskogo politekhn. in-ta, v. 138, 1965, 3-12

TOPIC TAGS: kinetic equation, crystal, f center, f center accumulation, M center, R center, monocrystal, alkali halide, proton irradiation

ABSTRACT: A study was made of the kinetics of the accumulation of F-, M-, and R-centers in alkali-halide monocrystals irradiated by protons with an energy of 5 Mev at room temperature. The depth of penetration of protons was determined from the thickness of the colored layer. For all the investigated crystals the concentration of M-centers was proportional to the square of the concentration of F-centers in the region of relatively small F-center concentration. An increase in the intensity of irradiation decreases the effectiveness of $F \rightarrow M$ conversion.

Card 1/2

In addition to the kinetics of F-center accumulation, LiF monocrystals were studied for the kinetics of the accumulation of complex electron coloration centers upon irradiation by protons. L. Devchenko. [Translation of abstract] [SP]

SUB CODE: 20/

Card 2/2

S/139/62/000/006/031/032
E039/E435

AUTHORS: Melik-Gaykazyan, I.Ya., Vaysburd, D.I.
TITLE: The formation of F-centres in solid solutions of KCl-KBr
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.6,
1962, 174-176

TEXT: Samples of single crystals of KCl-KBr solid solution thickness 0.2 to 0.4 mm are irradiated with X-rays (Mo anode, 15 mA, 50 kV) filtered through Zr filter 0.2 mm thick at a dose rate of 170 r/min. The composition is determined from the position of the F-band maximum in the absorption spectrum. Curves showing the dependence of the F-centre density with exposure have a fast nonlinear rise followed by a slower linear rise. The former is assumed to be due to anion vacancies and the latter F-centres formed from radiation generated vacancies. In quenched samples the F-centre density is always higher than for freshly grown samples. The rate of formation of defects must depend directly on the X-ray absorption coefficient and inversely on the energy of the crystal lattice. Results of experiments on irradiation of samples up to a dose of 40800 r show that maximum F-centre density $\sim 4.3 \times 10^{16} \text{ cm}^{-3}$ is achieved for pure KCl and that the

Card 1/2

The formation of F-centres,....

S/139/62/000/006/031/032
E039/E435

density falls off steadily as the KBr concentration is increased to $\sim 0.7 \times 10^{16} \text{ cm}^{-3}$ for 4 mole % KCl. In addition, the slope of the linear part of the F-centre build up curve decreases as the KBr content increases, and in the case of 4 mole % KCl shows that saturation is attained. It is assumed that, under the conditions of these experiments, with the increase in KBr content the rate of destruction of F-centres by X-rays increases faster than the rate of their formation. There are 2 figures. ✓

ASSOCIATION: Tomskiy politekhnicheskii institut imeni S.M.Kirova
(Tomsk Polytechnic Institute imeni S.M.Kirov)

SUBMITTED: November 14, 1961

Card 2/2

L 62708-65 REC(b)-2/EXP(1)/EXP(2)/EXP(3)/EXP(4) DE-4 TOPIC 10/12/75

ACCESSION NR: APS0177

11/11/1965 11/11/1965

AUTHOR: Vaysburd, D. I.; Melik-Gaykazyan, I. Ya.

TITLE: Radiation kinetics of accumulation of electron centers in alkali halide crystals in relation to the distribution of absorbed and stored radiation energy based on localization multiplicities

SOURCE: Teoreticheskaya i eksperimental'naya khimiya, v. 1, no. 2, 1965, 190-200

TOPIC TAGS: alkali halide, crystal, color center, lithium fluoride, proton irradiation, F center, radiation damage, radiation effect, alkali halide

ABSTRACT: It was established experimentally that during the irradiation of lithium fluoride single crystals with 1.1-Mev protons, the kinetics of accumulation of F-centers is represented by a curve with a maximum, and the efficiency of the F-M radiochemical reaction increases with the dose and total concentration of F-centers in the isolated and associated state. The following irreversibility processes responsible for the increase in the concentration of F-centers are considered: 1) statistical distribution of F-centers over multiple F-centers and 2) statistical distribution of the dose over the localization multiplicity. A kinetic equation

Card 1/2

L 62708-65

ACCESSION NR: AP5019730

for the accumulation of the stored energy with increasing dose is derived which accounts for the experimentally observed complex character of the kinetics of radiation-accumulation of F -centers in LiF. It is shown how 1) the coalescence volume of an F -center relative to the $F+M$ reaction and the coalescence volume of an M -center relative to the $M, F+R$ reaction and 2) the energy localization volume of a single proton in the crystal can be determined from the kinetics of the reaction of F - and M -centers. "We thank A. A. Gerasimov for reviewing the results of this work." Orig. art. has: 6 figures and 15 formulas. [14]

ASSOCIATION: Tomskiy politekhnicheskiv institut (Tomsk Polytechnic Institute)

SUBMITTED: 23Oct64

ENCL: 00

SUB CODE: 55, NP

NO REF SOV: 002

OTHER: 005

ATD PRESS: 4064

KL
Card 2/2

ACC NR: AP6002416

SOURCE CODE: UR/0020/65/165/005/1029/1032

AUTHOR: Vaysburd, D. I.; Melik-Gaykazyan, I.Ya.

ORG: Tomsk Polytechnical Institute (Tomskiy politekhnicheskiy institut im.S.M. Korova

TITLE: Equation for accumulation of radiation electron centers in alkali halide crystals

SOURCE: AN SSSR. Doklady, v. 165, no. 5, 1965, 1029-1032

TOPIC TAGS: alkali halide, defect center, radiation damage, radiation effect, IRRADIATION, CRYSTAL STRUCTURE ANALYSIS

ABSTRACT: The authors have established in a previous paper (Teoreticheskaya i eksperimental'naya khimiya, 1, 190, 1965) that at room temperature the build-up of F-centers (n_F) in LiF monocrystals can be expressed as a curve with a maximum, and the efficiency of radiochemical coagulation of the F-centers into M-centers (n_M/n_F^2) increases. At a uniform distribution of the dose and in the absence of $M \rightarrow F$ type reverse reactions, such an irreversible process is a build-up of the total concentration of F-centers in single and associated states

$$n = n_F + 2n_N + 3n_R + \dots + in_{F_1} + \dots \quad (1)$$

Card 1/2

UDC: 539.293

ACC NR: AP6002416

The distribution of F-centers along multiple F_1 -centers follows Poisson's law. Based on the results of a mathematical argument, the authors conclude that with increase of the dose and the mean multiplicity of localization, the maximum distribution of the irradiated volume decrease and the half-width increases. The irradiated crystal becomes homogeneous and the experimental efficiency of the $F \rightarrow M$ reaction approaches the theoretical efficiency. Orig. art. has: 15 formulas and 2 figures.

SUB CODE: 20 / SUBM DATE: 25Mar65/ ORIG REF: 001/ OTH REF: 004

Card 2/2

L 35326-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JW/JG/GG
ACC NR: AP6026837

SOURCE CODE: UR/0020/66/166/002/0391/0394

AUTHOR: Vaysburd, D.I.; Melik-Gaykazyan, I.Ya.

ORG: Tomsk Polytechnic Institute im. S.M. Kirov

TITLE: Distribution of absorbed and accumulated emission energy with respect to localization multiplicities in a solid

SOURCE: AN SSSR. Doklady, v. 166, no. 2, 1966, 391-394

TOPIC TAGS: proton, lithium fluoride, irradiation, single crystal

ABSTRACT: The authors studied the accumulation of F- and M-centers in proton-irradiated single crystals of lithium fluoride. The study was based on the fact that the depth of penetration of protons into the crystal, and therefore the thickness of the color layer, depends on the proton energy. The accumulation of F-centers was studied to concentrations of approximately $5 \cdot 10^{19} \text{ cm}^{-3}$. The effectiveness of the F-M reaction (which is defined as $K_M W_M / (K_F W_F)$, where K_F and K_M are the coefficients of absorption at the maxima for the F- and M-bands respectively, and W_F and W_M are the half-widths of the corresponding bands) decreases with the radiation dose in the region where accumulation of R-centers is insignificant. The effectiveness of this reaction decreases with a reduction in proton energy and shows satisfactory correlation with the depth of proton penetration for a number of alkali halide crystals. It was assumed that overlapping of proton tracks in the crystal is responsible for these

Card 1/2

UDC: 539.293+539.294+548.4+539.12.04

L 35320-66

ACC NR: AP6026837

effects. Interaction between the solid and each individual quantum or particle is accompanied by absorption of a certain average energy $\epsilon = D/j$, where D is the radiation dose and j is the number of particles colliding in a unit volume of the target. The energy absorbed from the quantum is concentrated in a localization volume or track which is much less than the volume of the target for most types of radiation. When a solid is irradiated, there is the probability of spatial overlapping of quantum localization regions. This phenomenon is called multiple localization of radiation energy and the number of coincident localization volumes is called the multiplicity of localization at the point of overlap. The authors determined the distribution of the irradiated volume with respect to localization multiplicities of absorbed radiation energy. It is shown that the effectiveness of the F-M reaction is higher for crystals in which the volume of the track is greater for irradiation of crystals with various chemical compositions. The track volume is greater for crystals in which the stopping power is lower. This explains the correlation between reaction effectiveness and depth of proton penetration. It was found from the energy accumulated in F-centers, assuming a cylindrical track, that the diameter of a 2.7 Bev proton track is 35 Å. This article was presented by V.N. Kondrat'yev on 23 March 1965. The authors thank A.A. Vorob'yev for discussion of the results. Orig. art. has: 3 figures and 5 formulas./JPRS: 36,4557

SUB CODE: 20 / SUBM DATE: 08Jan65 / ORIG REF: 002 / OTH REF: 005

Card 2/2 *lkh*

L 08359-67 EWT(1) IJP(c) GG
ALL NR AR6028134

SOURCE CODE: UR/0058/66/000/005/D057/D057

59

AUTHOR: Vaysburd, D. I.

TITLE: Law of distribution of absorbed and stored radiation energy relative to the multiplicities of localization in a solid

SOURCE: Ref. zh. Fizika, Abs. 5D441

REF. SOURCE: Izv. Tomskogo politekhn. in-ta, v. 138, 1965, 13-19

TOPIC TAGS: color center, statistic distribution, solid state, light absorption, light energy, crystal defect, radiation damage

ABSTRACT: Starting from the assumption that the possibility of appearance of high local concentrations of color centers is inherent in the distribution of the absorbed and stored energy in the solid, the authors solved the problem of the probability distribution of the irradiated volume relative to the multiplicity of localization (ML) of the energy. By ML is meant the number of coinciding elementary localization volumes, that is, volumes in which the energy of one absorbed particle or quantum is distributed. The obtained laws make it possible to explain the uneven distribution of radiation defects and its variation with increasing radiation dose for crystals that have different chemical compositions and are exposed to different types of radiations. [Translation of abstract]

SUB CODE: 20
Card 1/1 nst

VAYSBURD, I.A.; ZADVORNYAK, P.V.

Clinical and electrocardiographic observations during the 1957
influenza outbreak in Stalinabad. Zdrav. Tadzh. 6 no.6:19-22
'59. (MIRA 13:4)

1. Iz kafedry infektsionnykh bolezney (zav. - dotsent D.M. Khashimov)
Stalinabadskogo medinstituta im. Abuali ibni Sino.
(STALINABAD--INFLUENZA) (ELECTROCARDIOGRAPHY)

VAYSBURD, I.A.

Infection with the cutaneous form of anthrax following accidental
subcutaneous injection of TSenkovskii's second vaccine. Zdrav.
Tadzh. 7 no.1:40-43 Ja-F '60. (MIRA 13:5)

1. Iz Stalinabadskoy gorodskoy infektsionnoy bol'nitsy.
(ANTHRAX)

SHAPIRO, S. E., KUTCHAK, S. N., VAYSEURO, I. A.

Fever

Hemorrhagic fever. Fel'd.i akush. No.9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

U.S.S.R.

OYVIN, V.I.; KORETSKAYA, L.S.; KHASHIMOV, D.M.; ~~WATSON, J.A.~~

Distribution of antibodies in protein fractions of blood plasma of patients having acute dysentery [with summary in English]. Vop.med.khim. 3 no.3:190-194 My-Je '57. (MLRA 10:8)

1. Stalinabadskiy institut epidemiologii i gigiyeny, kafedra patofiziologii i kafedra infektsionnykh bolezney Stalinabadskogo meditsinskogo instituta imeni Avitsenny
(DYSENTERY, BACILLARY, immunol.

antibody distribution in blood protein fractions (Rus))